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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,764	12/30/2000	Anurag Nigam	4906.P014	5069

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EXAMINER

JONES, PRENELL P

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/751,764

Applicant(s)

NIGAM ET AL.

Examiner

Prenell P Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 12-14, 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 7-11, 15-18 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

***Detailed Action***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-3, 19-21, drawn concatenating packet data into a TDM SONET signal, classified in class 398, subclass 49, 72, 95, 98 and 99.
  - II. Claims 4-6, 12-14, 22-24, drawn concatenating packet data into a TDM SONET signal and determining that a number of packets are being transmitted to a first location that can not extract the number of packets from any of the number of SONET frames in the first TDM SONET signal classified in class 370, subclass 395, 225, 466, 473, 492.
  - III. Claims 7-11, 15-18, 25-27, drawn determine packet boundaries of packets in buffers of a TDM SONET system, classified in class 370 and subclass 412, 429, 503.
2. The inventions are distinct, each from the other because of the following reasons:

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and Group III, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Daniel M. DeVos on July 15, 2004 a provisional election was made without traverse to prosecute the invention of Group III,

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claims 7-11, 15-18 and 25-27. Affirmation of this election must be made by Applicant in replying to this Office action. Claims 1-6, 12-14 and 19-24 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claims 1-6, 12-14 and 19-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7, 9-11, 15, 17, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom in view of, De Moer et al and Bianchini et al.

Regarding claims 7, 9, 15, 17, 25 and 27, Sandstrom discloses (Abstract, col. 2, line 31 thru col. 4, line 67) dynamic adjustment of capacity with respect to TDM SDH/SONET connections wherein the architecture includes SONET rings, (col. 5, line 50 thru col. 6, line 68) communicating SONET frames, packet source buffers for different traffic priority

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classes, concatenated packets/payloads, (col. 7, line 43-64) packet length (boundary) corresponding to SONET frame is provided. Sandstrom is silent on placing portions of packets in memory/buffers. In analogous art, De Moer discloses (Abstract, col. 3, line 34 thru col. 5, line 27) data transmission in a TDM SONET optical ring system, concatenated data is associated with size of data blocks wherein the architecture (col. 9, line 21-54, col. 13, line 10-50) includes portions of data blocks/packets/payloads are transmitted and stored in memory/buffer, portions of data are marked for transmission and Bianchini discloses a switching network used for switching packet data whereby (Abstract, col. 6, line 45 thru col. 8, line 35) the architecture includes APS (automatic protection switching) a SONET/SDH redundancy standard, packets/data is combined into a single data stream, TDM network, (col. 1, line 40 thru col. 3, line 42, plurality memory/buffer, switch consist of fabrics, fragments/portions of data is sent to each fabric, ATM blade segments frame to cells, (col. 17, line 14 thru col. 19, line 25) existence of multiple queues used to store packets, packet length/boundary is stored for MC packets. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement determining placing portions of data in memory and determining packet boundaries/size/length stored in buffers as taught by the combined teachings of De Moer and Bianchini with the teachings of Sandstrom for the purpose of further managing a capacity conscious communication system as to eliminate/minimize congestion and identify concatenated data.

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Regarding claims 10 and 11, as indicated above, De Moer discloses (Abstract, col. 3, line 34 thru col. 5, line 27) data transmission in a TDM SONET optical ring system, concatenated data is associated with size of data blocks wherein the architecture includes portions of concatenated packet data/payload is transmitted and stored in memory/buffer. De Moer further discloses transmission of various size data blocks with respect to inter-ring and intra-ring (col. 6, line 33 thru col. 8, line 67) protection switch allows data from external rings access to storage/memory in case of device/system failure.

***Allowable Subject Matter***

5. Claims 8, 16 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Although the cited prior art teaches dynamic adjustment of capacity with respect to TDM SDH/SONET connections wherein the architecture includes SONET rings, communicating SONET frames, packet source buffers for different traffic priority classes, concatenated packets/payloads, packet length (boundary) corresponding to SONET frame is provided, data transmission in a TDM SONET optical ring system, concatenated data is associated with size of data blocks wherein the architecture includes portions of concatenated packet data/payload is transmitted and stored in memory/buffer, a switching network used for switching packet data whereby the architecture includes APS a SONET/SDH redundancy standard, packets/data is

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combined into a single data stream, TDM network, plurality memory/buffer, switch consist of fabrics, fragments/portions of data is sent to each fabric, ATM blade segments frame to cells, existence of multiple queues used to store packets, packet length/boundary is stored for MC packets they fail to teach/suggest packets concatenated within locations in the TDM SONET signal not occupying TDM data traffic.

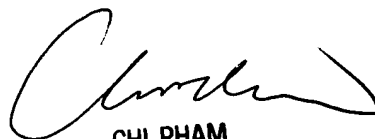
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 703-305-0630. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

July 17, 2004



CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600 1/20/04